FIG. 1

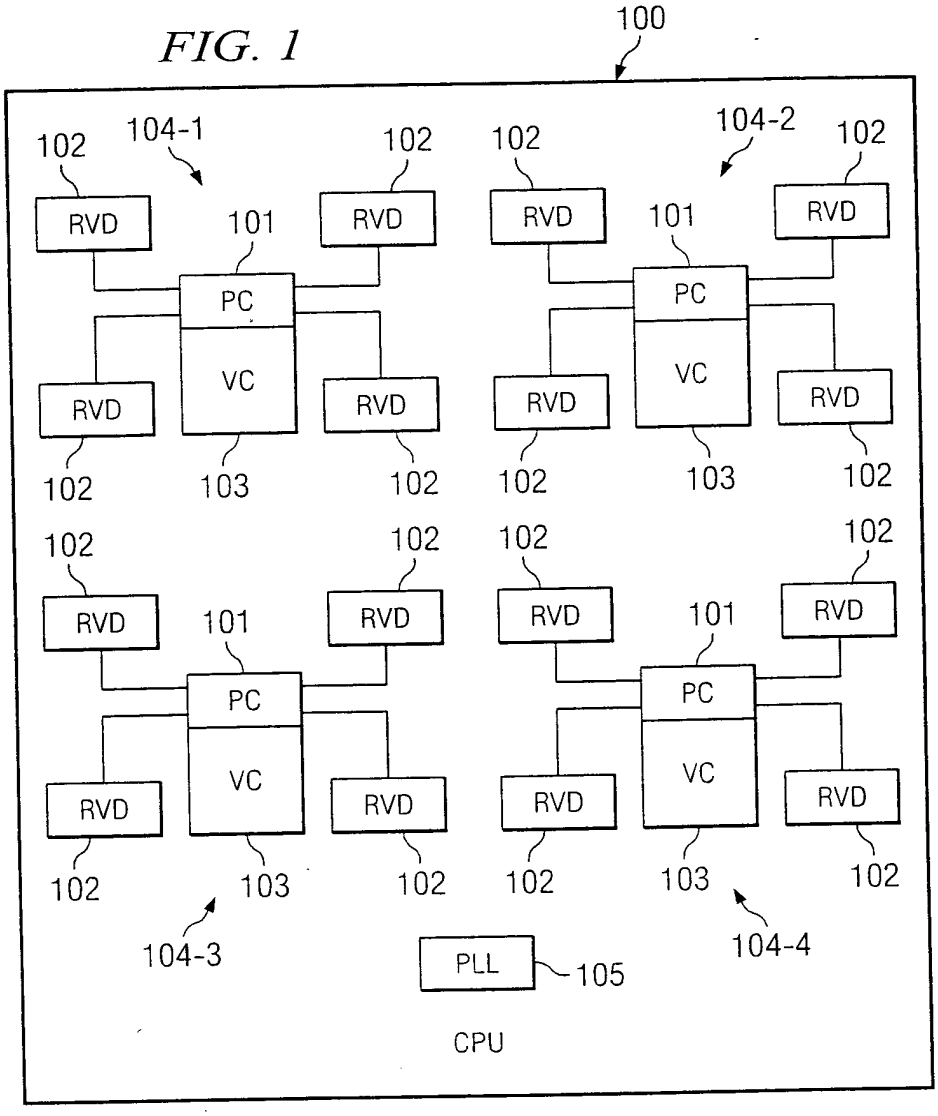


FIG. 2

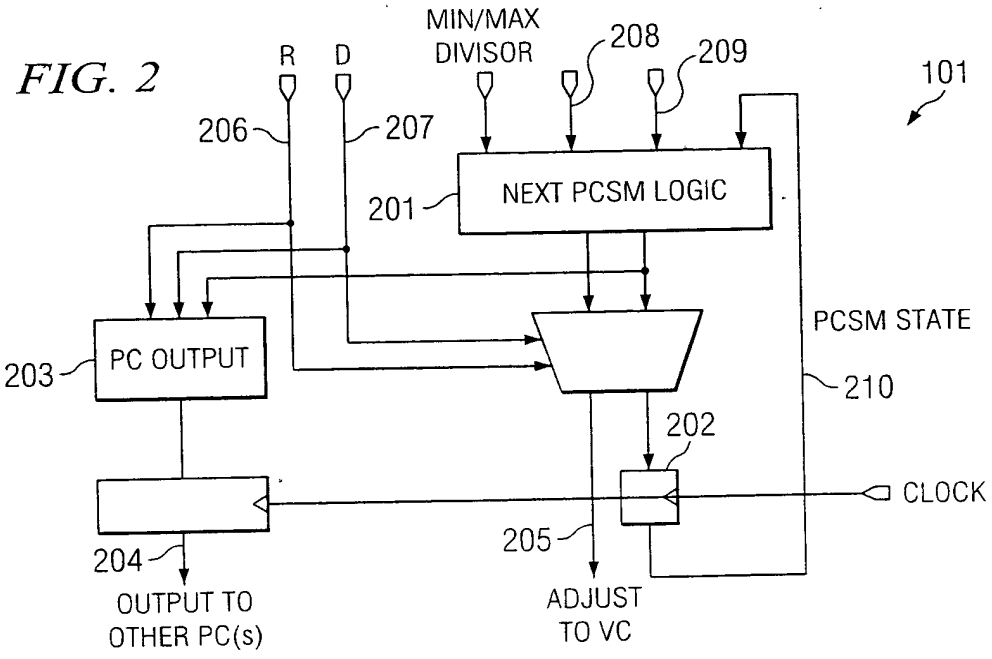

MIN/MAX DIVISOR
R
D
208
209
101
206
207
201
NEXT PCSM LOGIC
PCSM STATE
203
PC OUTPUT
210
202
CLOCK
204
205
OUTPUT TO OTHER PC(s)
ADJUST TO VC

FIG. 3

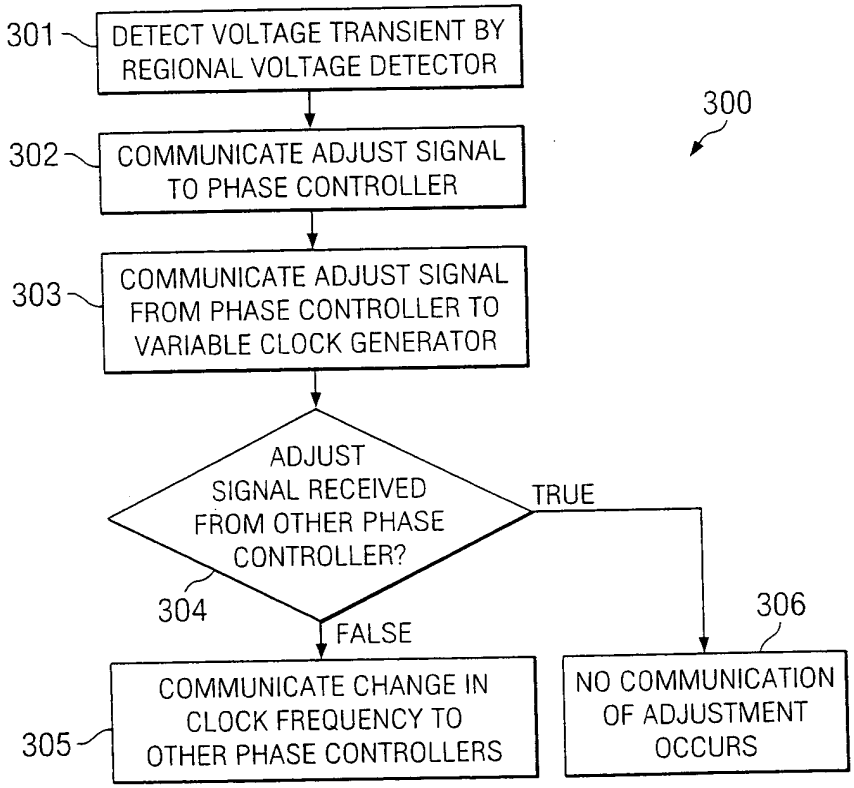

301
DETECT VOLTAGE TRANSIENT BY REGIONAL VOLTAGE DETECTOR
300
302
COMMUNICATE ADJUST SIGNAL TO PHASE CONTROLLER
303
COMMUNICATE ADJUST SIGNAL FROM PHASE CONTROLLER TO VARIABLE CLOCK GENERATOR
ADJUST SIGNAL RECEIVED FROM OTHER PHASE CONTROLLER?
TRUE
304
FALSE
306
305
COMMUNICATE CHANGE IN CLOCK FREQUENCY TO OTHER PHASE CONTROLLERS
NO COMMUNICATION OF ADJUSTMENT OCCURS

FIG. 4

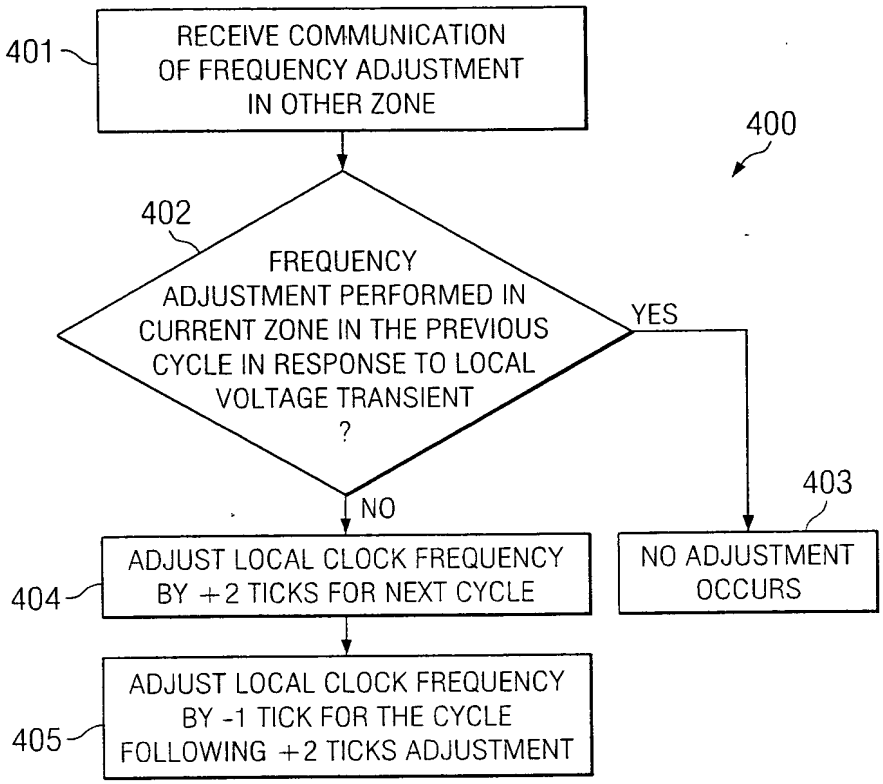
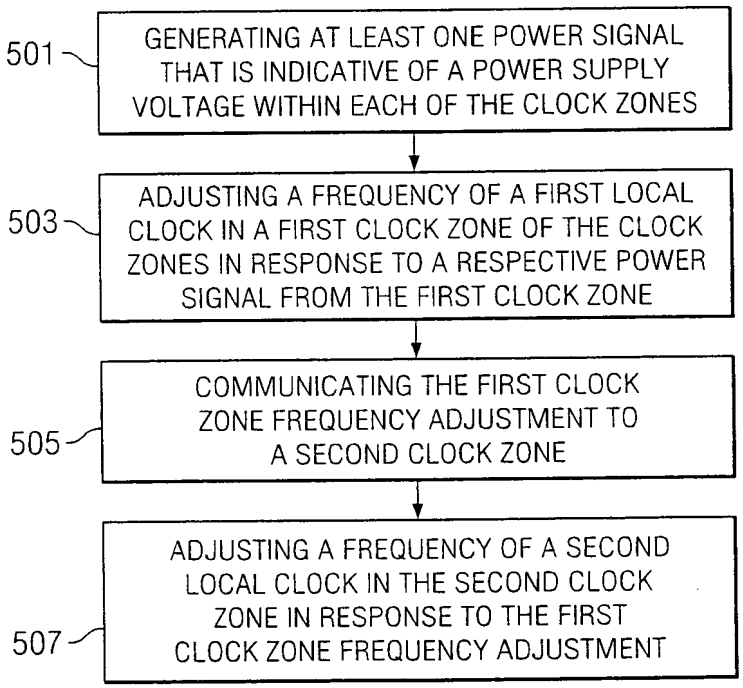

401
RECEIVE COMMUNICATION OF FREQUENCY ADJUSTMENT IN OTHER ZONE
400
402
FREQUENCY ADJUSTMENT PERFORMED IN CURRENT ZONE IN THE PREVIOUS CYCLE IN RESPONSE TO LOCAL VOLTAGE TRANSIENT ?
YES
NO
403
NO ADJUSTMENT OCCURS
404
ADJUST LOCAL CLOCK FREQUENCY BY +2 TICKS FOR NEXT CYCLE
405
ADJUST LOCAL CLOCK FREQUENCY BY -1 TICK FOR THE CYCLE FOLLOWING +2 TICKS ADJUSTMENT

FIG. 5


501
GENERATING AT LEAST ONE POWER SIGNAL THAT IS INDICATIVE OF A POWER SUPPLY VOLTAGE WITHIN EACH OF THE CLOCK ZONES
503
ADJUSTING A FREQUENCY OF A FIRST LOCAL CLOCK IN A FIRST CLOCK ZONE OF THE CLOCK ZONES IN RESPONSE TO A RESPECTIVE POWER SIGNAL FROM THE FIRST CLOCK ZONE
505
COMMUNICATING THE FIRST CLOCK ZONE FREQUENCY ADJUSTMENT TO A SECOND CLOCK ZONE
507
ADJUSTING A FREQUENCY OF A SECOND LOCAL CLOCK IN THE SECOND CLOCK ZONE IN RESPONSE TO THE FIRST CLOCK ZONE FREQUENCY ADJUSTMENT